RELEASING TERMINOLOGY INHIBITIONS IN MEDICAL ENGLISH UNDER A POSTMODERNIST INFLUENCE

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There is a universally acknowledged truth that the medical lexis is largely composed of Greco-Latin vocabulary. There is also a general assumption that health professionals supposedly possess no other relevant linguistic means but the Greco-Latin terms to communicate clinically specific information. In a postmodernist approach, however, there is an ‘assault’ on this dogmatic view. To the postmodern eye, the truth is pluralistic; diverting opinions are embraced when constructing this truth. And if postmodernist approach welcomes pluralism and open-mindedness in composing this information, then health professionals may well construct the evidence-based information through various linguistic devices, rather than relying exclusively on fixed terminology and concepts of Latin and Greek origin. This means that the evidence-based medical and clinical information may be communicated, *inter alia*, by such constructs as metaphors and metaphoric expressions.

*Keywords: postmodern values, health professional, physician, doctor, clinician, medical terms, metaphors, metaphoric expressions, health conditions.*

Introduction

The present paper aims at studying certain aspects of postmodernist influences on the language of medicine, with special reference to the usage of metaphors and metaphoric expressions in a number of medical fields. The significance of the research lies in the fact that it makes evidence-based claims on examples generated from the scientific community. Methods of descriptive and quantitative analysis were employed throughout this study with major reference to conceptual content analysis.

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It should be mentioned that modern healthcare owes greatly to the 1980s for being a solid amalgamation of major technologic advances and improvements in medicine and care delivery. Such breakthroughs as laser surgeries, first vaccine developed for Hepatitis B, announcement of a worldwide eradication of smallpox, surgical robots, devising a genetic fingerprinting method were the timeline stars in the field of medicine, science and practice (Hajar, 2015). In addition, the 1980s in medicine also coincided with the postmodernist movement emerged in the mid-20th century. And the postmodern cultural values ‘came and stayed for good’ with long-term introduction of such operations and concepts as the “corporate control of medical care, computerization of medical information and consumerism in the clinical encounter” (Eiser, 2014).

In relation to consumerism, we shall note that all people are to a certain extent consumers of healthcare services and products. One of the major goals of consumerism is the promotion of the consumer’s interests. And one of these interests is the accessibility to healthcare information and findings in an understandable manner. This inevitably provokes the issue of communication and translation of science to the wider public. Communication of clinically-specific information gains central importance not only in terms of interpersonal doctor - patient encounter, but also from a wider doctor - audience perspective. This wider form of communication is ensured at scientific meetings or symposia and is largely achieved through published medical literature. This literature, while detailing various medical phenomena, also involves evidence-based medical data about diseases, its diagnosis, treatment options, medical hypotheses and theories, etc. The literature comes in many forms - research papers, clinical case studies, qualitative or quantitative analyses of clinical trials, etc. These papers enable health professionals to disseminate findings and theories strategic to health policy and practices, expose their ideas to critical appraisal and review and keep abreast of global scientific community and developments. And, naturally, when publicizing their works, health professionals make use of needed terms and linguistic constructions. In this sense we should note that, there was long a universal belief that since the medical lexis is largely composed of Greco-Latin vocabulary, doctors and clinicians supposedly posses no other relevant linguistic means but the Greek and Latin terms to communicate clinically specific information.
This was the truth for many decades. In a postmodernist approach, however, there is an ‘assault’ on this dogmatic view allowing scholars to challenge the exclusive usage of Greek and Latin vocabulary.

**Better communication for better health**

In sense of medical language, the postmodern values transformed perceptions about the fixed terms and rigid linguistic constructions and paved way for improved communication. Scientists, health professionals and researchers started to acknowledge that their communication with the wider public could not be successful if they used scientific jargon, and for in that case they could not expect unconditional trust. “People tend to mistrust things they cannot understand.” (Racovita, 2013). The mistrust in scientific findings may hinder, for instance, one of the ultimate goals of health professionals - raising public awareness regarding various health conditions and ensuring early prevention before it could be too late. Health professionals have come to acknowledge that explaining their findings by considering the receiver, and where possible, ‘adapting the message and language accordingly’ (Racovita, 2013), would give a huge advantage over the conventional terms and linguistic constructions. Doctors and clinicians acknowledge that science cannot progress and achieve its goals in isolation from the society, and that by improving communication of scientific facts, by devising a more accessible language, they would be far better off - they can reach out to laypeople who are not medical specialists, and thus succeed in one of the major goals of raising awareness and understanding various health conditions.

In other words, “If scientists want to prevent their messages from being misunderstood..., they should consider proactively translating their research for a wider audience themselves, in an inclusive and contextualized manner.” (Racovita, 2013). In the context of ‘translating research’, a tribute shall also be paid to the scholars who have voiced their concerns about increasing specialization of medical language in terms of its isolation from conventional phraseology and certain norms of ordinary language, which, if present in writing and speech, would make the medical language easy for laypeople to digest. For instance, this can be well illustrated by extensive usage of medical jargon. In an essay *The Source of Bad Writing* published in Wall Street Journal in 2014, Steven Pinker, a psychologist from Harvard University, examines such writing and offers self-experienced perspective on how scholars abuse language with technical jargon overload:
I once attended a lecture on biology addressed to a large general audience at a conference on technology, entertainment and design. The lecture was also being filmed for distribution over the Internet to millions of other laypeople. The speaker was an eminent biologist who had been invited to explain his recent breakthrough in the structure of DNA. He launched into a jargon-packed technical presentation that was geared to his fellow molecular biologists, and it was immediately apparent to everyone in the room that none of them understood a word and he was wasting their time. Apparent to everyone, that is, except the eminent biologist. When the host interrupted and asked him to explain the work more clearly, he seemed genuinely surprised and not a little annoyed. (Pinker, 2014)

Pinker claims this is because of ‘curse of knowledge’ that authors mostly do not imagine “what it is like for someone else not to know something that you know” (Pinker, 2014). In terms of medically-specific information, this does not warrant complete elimination of already existing medical terminology. In this case health professionals are assumed to boost understanding by using descriptive language, explaining the meaning of technical terms, substituting them with lay descriptions, using metaphors, metaphoric constructions and analogy where possible. It is from this perspective that we have established that doctors and clinicians often make use of metaphors and metaphoric constructions to denominate diseases, pathologies and health conditions, for they acknowledge that the choice of words and the style of writing become determinants in achieving specific health goals and objectives.

Releasing terminology inhibitions through metaphors

From amongst a myriad of figures of speech to ‘translate medical research and science’ we have filtered a number of metaphors and metaphoric expressions based on how understandable they can make the nature of the given health condition and syndrome. For instance, one such metaphor used in forensic medicine is the term washerwoman’s changes, washerwoman syndrome or washerwoman’s skin which literally means changes in the skin condition that result from being immersed in water (Washerwoman Syndrome Definition,
The syndrome relates to swelling of the skin tissue as a result of being immersed in water and absorbing a great amount of water. This triggers skin proteins to increase in length followed by enlargement of the skin being folded up and wrinkled (Washerwoman Syndrome Definition, n.d.). The description of this condition is of particular importance when dealing with the forensic examination of the human body which can be illustrated by the testimony of the forensic physician in the following excerpt from a 2001 court case:

Dr. MacDonald’s opinion that the deceased did not die in the bathtub was based on the absence of washerwoman changes or syndrome on her body. Washerwoman syndrome may be described as changes in the skin condition that result from being immersed in water. According to Dr. MacDonald, if the deceased was in cool water, which would reduce the extent of washerwoman changes, he would not have expected the extent of rigor which was observed by the first responders. (v. Khan, 2001)

Such descriptions appear in many testimonies given by a forensic physician or pathologist and form part of major objective evaluations and clues to a case holding. Numerous research papers and reports showcase this with the following excerpts:

The development of washerwoman’s hands depends upon the length of submersion. Until now there have been no results published on the qualitative and quantitative time-related changes with regard to washer-woman’s hands. (Weber & Laufkötter, 1984)

The findings are strongly reminiscent of the so-called washerwoman’s skin, as seen after exposure to a moist environment for at least several hours. (Bohnert & Pollak, 2003)

Studies were carried out systematically in both corpses and the hands of corpses in order to find out when washerwoman’s skin begins. The temperatures ranged
between 10 degrees and 18 degrees C and the time of the experiments did not exceed 300 min. The initial formation of washerwoman’s skin could be observed after 20-30 min at the fingertips and after 50-60 min in the entire finger.”, “The course of washerwoman’s skin obviously depends on the water temperature, and afterwards it disappears rather slowly--even after a short immersion--in the open air. (Reh, 1984)

Perhaps the most well-known external change that immersion in liquid has on the body is wrinkling of the skin, particularly involving the hands and feet. Traditionally this has been called washerwoman’s hands or washerwoman’s changes. (Caruso, 2016)

His corpse depicted reddish green discoloration of the skin and showed changes associated with postmortem immersion, such as washerwoman’s skin and slippage of the epidermis. (Pittner et al., 2020)

The body and clothing were all wet at scanning and autopsy. The soles of the feet and palms of the hands showed washerwoman changes. (Rutty, 2017)

Some other metaphoric expressions are used to describe a health condition relate to the field of Dermatology - “a medical specialty concerned with the skin, its structure, functions, diseases, and treatment.” (Dermatology, n.d.). One of such skin conditions is known as fish skin disease or fish scale disease. This is a congenital disorder of skin; characterized by dryness and at times, excessive scaling of the skin, most probably associated with the scales on a fish. Technically, this is called ‘ichthyosis’ which derives from the Ancient and the Classical Greek word ichthyys (ιχθυς) meaning ‘fish’ (Ichthys, n.d.), to which fish scale disease or fish skin disease owes its name. Descriptions of this skin condition use the technical term and further make reference to its Greek roots and the metaphor used to explain the disease. The statements below illustrate this practice of employing descriptive metaphoric constructions:
The scales of ichthyosis vulgaris, sometimes called fish scale disease or fish skin disease, can be present at birth, but usually first appear during early childhood. (Ichthyosis vulgaris, n.d.)

Ichthyosiform changes of the shins presents with large bilateral areas of dryness and scaling (sometimes described as fish scale skin). (Labib et al., 2000)

The word ichthyosis comes from the Greek root ichthys, meaning fish, referring to the cutaneous scaling that is characteristic of these disorders, which is said to resemble the scales of a fish. (Craiglow, 2013)

Ichthyosis is derived from a Greek word, ichthys, which means fish. It refers to a fish-scale-like appearance of skin. (Shruthi et al., 2017)

Despite the extensive usage of the technical term ‘ichthyosis’, reference to descriptive metaphor is frequently made for purposes of clarity and understanding. Another metaphorical construction describes the grouping of small and dilated blood vessels which are clustered just beneath the skin surface, so that they can be easily visible. This is called spider angioma or spider naevus and is most often seen on human face, ears, neck, hands and arms. They get their name from their physical appearance similar to a small red spider with tiny legs. They contain a central, red spot and deep reddish extensions, where the red spot is the body - resembling or representing a spider’s body; the fine reddish lines are the legs - radiating in a spider-legged fashion (Samant & Kothadia, 2021). Almost every clinical case and research paper studying this skin condition thoroughly describes it through metaphorical analogy, such as:

Spider angiomas are peculiar cutaneous lesions which usually are associated with liver disease. ... They are named so because the radiating vessels mimic the appearance of a spider. Other names include spider nevus, vascular spider,
nevus araneus, arterial spider tâche stellaire, or just as spiders.

Elevated substance P levels have also been reported in patients with spider angiomas. … Presence and the number of spider angiomas increase with worsening liver disease and may decrease with improvement of liver function. Spider angiomas do not usually warrant a specific therapy and disappear with improvement in hepatic function. (Sharma & Sharma, 2014)

Of children without liver involvement, 38% had at least one spider naevus. The prevalence of spider naevi increased with age. Of control patients aged 5 to 15 years, 2.5% had more than five spiders present. Although eight of 10 children with cirrhosis had at least one spider naevus, only four of 34 children with chronic liver disease had five or more spiders present. Most spiders were on the hands and very few were >5 mm in size. (Finn et al., 2006)

Spider nevus is a common sign of liver cirrhosis. Spider nevus is so named because of its spider-like appearance in which there is a central red arteriole and radiating thin-walled vessels resembling the body and legs of a spider, respectively. In the general population, it has been reported that the presence of spider nevus is associated with thyrotoxicosis and excessive estrogen, such as pregnancy and oral contraceptives. The prevalence of spider nevus and subcutaneous collateral vessel of the chest/abdominal wall was 47% and 29.8%, respectively. Patients with spider nevi had a significantly higher proportion of alcohol abuse (54.84% vs. 26.67%, p < 0.001).

Notably, nearly all spider nevi occurred at the chest wall; by comparison, spider nevus was hardly observed at the abdominal wall. Therefore, no comparison was performed according to the location of the spider nevus. (Li et al., 2019)
Interestingly, descriptive metaphoric terms and constructions are used not only for naming diseases and skin conditions, but also different birthmarks. Birthmarks are areas of discolored and/or raised skin that are present at birth or within a few weeks of birth (Birthmarks in Infants, n.d.). For example, there are birthmarks known as salmon patches which may manifest in form of stork bite and/or angel kisses. Salmon patches appear as small, pink or red flat marks on human skin and if they appear on the back of the neck, it is commonly called stork bite. Per mythology, these marks are where the stork may have picked up the baby (Birthmarks in Infants, n.d.). If salmon patches appear on the forehead, eyelids or between the eyes, they are often called angel’s kiss or angel’s kisses. This distinction is made in various case studies on birthmarks, such as, Salmon patches, also known as nevus flammeus simplex, are the most common vascular lesions in infancy. Colloquially, the lesions on the forehead and eyelids are known as angel’s kisses and the ones in the occipital area as stork bite marks (Leung et al., 2014). Salmon patch or nevus simplex was the most commonly found vascular birthmark in this study, which was consistent with the results of other studies from various countries. The typical location is usually the upper eyelids, forehead (also called an angel kiss), and nape of neck (also called a stork bite) (Techasatian, 2019), etc.

The list of birthmarks involves also the so-called strawberry marks, strawberry naevi or strawberry hemangioma. These birthmarks might be bright red and bumpy and appear anywhere on the body, but are most common on the face, back, or chest. They consist of small, raised, bumpy skin resembling, in appearance and outer texture, a strawberry. The following excerpts are specifically chosen to illustrate the metaphoric description:

Hemangiomas, also known as hemangiomas of infancy or infantile hemangiomas (IH), are the most common benign tumor of infancy. They are often called strawberry marks due to their clinical appearance. (Chamli et al., 2022)

Clinically, the strawberry naevi represent the most common variant of infantile haemangioma – referred to as superficial haemangiomas. (Roberts, 2009)

The lesions to be considered are not the flat vascular nevi (spider nevus, erythema nuchae or port-wine stain), nor the
multiple hemangiomatous syndromes, but rather the raised vascular nevi (strawberry marks, cavernous hemangiomas). Strawberry nevi may be found on any part of the body surface, appearing first at or soon after birth as sharply delineated pale areas which become bright red, raised and tense within the first few weeks.

...was able to examine 60 school children with remnants of spontaneously involuted strawberry marks and 266 children who had received various forms of treatment.”. “A review of the literature on the natural history of strawberry hemangiomas revealed over-whelming evidence of the satisfactory spontaneous involution of over 95 per cent of these lesions without the scarring and danger of other sequelae inherent in the various forms of treatment. In a study of 105 strawberry nevi observed for more than one year, 97 per cent of the lesions had either completely disappeared or were regressing satisfactorily. (Jacobs, 1957)

“Bivings (1954), after 22 years’ observation of 236 cases, considered that all strawberry naevi disappear, as do most spider naevi and most cavernous haemangiomata.” (Illingworth, 1976)

Infantile hemangiomas, otherwise known as infantile capillary hemangiomas, strawberry hemangiomas, or strawberry nevi, are nonmalignant vascular tumors that commonly affect children. (Satterfield et al., 2019)

Superficial IHs ... are those in which the surface of the tumor appears red and there is little to no discernible subcutaneous component; historically, these IHs have been described as being of the strawberry type. (Darrow, 2015)

Another birthmark is known as port wine stain. It is a pink, red, or purple colored birthmark which usually occurs on the head or neck of a newborn, but may also be seen on other areas of the body, as explained in the following statements:
Port wine stain (PWS), also known as congenital capillary vascular malformation, results from differentiation-impaired endothelial cells (ECs) in human skin with a progressive dilatation of immature venule-like vasculatures. PWS initially appears as flat red macules in childhood; lesions tend to darken progressively to purple with soft tissue hypertrophy and, by middle age, often become raised as a result of the development of vascular nodules which are susceptible to spontaneous bleeding or hemorrhage. (Nguyen et al., 2019)

 Patients born with port wine stains should have early laser treatment to achieve optimal results. Delay in treatment, as in this patient until age 26, may result in hard to treat PWS that can continue to progress in nodularity. (Minkis et al., 2009)

Port-wine stains are a type of capillary malformation affecting 0.3% to 0.5% of the population. Port-wine stains present at birth as pink to erythematous patches on the skin and/or mucosa. (Brightman et al., 2015)

Port-wine stain (PWS) birthmarks are congenital, low-flow vascular malformations of the skin. Lasers are the modality of choice for the treatment of PWS birthmarks, (Kelly et al., 2005)

Making reference to patches on skin qualified as birthmarks or earliest manifestations of underlying health conditions, we should also highlight the extensive use of the term coffee-with-milk spots, café-au-lait spots or café-au-lait macules. These are patches with smooth or irregular borders seen on the surface of human skin and range in size and colour from light-to-medium-to-dark brown, and are best described in statements below:

Café-au-lait (CAL) spots are pigmented birthmarks that appear as patches on your skin with a light to dark brown
color that differs from the tone of the rest of your skin. The term café-au-lait means coffee with milk in French, which refers to the color of the birthmark, comparing it to the creamy tone of a cup of coffee mixed with milk. These birthmarks can range from a few millimeters to more than 20 centimeters in diameter. (Café-au-Lait Spots, n.d.)

*Café-au-lait*, also referred to as *café-au-lait spots* or *café-au-lait macules*, present as well-circumscribed, evenly pigmented macules and patches that range in size from 1 to 2 mm to greater than 20 cm in greatest diameter. Café-au-lait are common in children. (Shah, 2010)

*Café-au-lait macules* (CALMs) are common hyperpigmented and flat skin lesions found in the general population. They are usually present at birth (congenital) or occur early in life. They may grow in number and size with age. The color varies from light brown to dark brown, and they may be present on any body parts, but the most common location is the trunk and the extremities. The term *café-au-lait* is a French word meaning coffee with milk. (Jha, 2022)

A *café-au-lait macule* (CALM) is an evenly pigmented macule or patch of variable size. (Madson, 2012)

*Café-au-lait maculae* (CALM) are named after their typical coffee-and-milk hue, and a color only slightly darker than the surrounding skin. (Santos et al., 2016)

*Coffee-with-milk* (café au lait) spots are the hallmark symptom of NF. Many healthy people have one or two small café au lait spots. However, adults who have six or more spots that are bigger than 1.5 cm in diameter (0.5 cm in children) could have NF. In some people with the condition, these spots may be the only symptom. (Neurofibromatosis Type 1 (NF1), n.d.)
Conclusion

It shall be noted that there are multiple metaphors and metaphoric descriptions across various branches of medicine. However, their complete and thorough analysis is beyond the scope of this paper. This research was specifically designed to demonstrate that under postmodernist influences societal factors can become determinants even in fixed and rigid sciences like medicine. Medical and healthcare interests - in this case raising public awareness and disease prevention, drive scientific progress and its application in a specific pathway, where aspirations of health professionals are modeled to serve both professional goals and the wider health policy objectives.

References

**Birthmarks in Infants.** (n.d.) *Johns Hopkins Medicine, Health*. Retrieved March 5, 2022.


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Ալինա Պետրոսյան

Սրբագիծով և աշխատակիր տեսակետով կան այն անձանց, որ բժշկագիտական հիմնապահեսանքին դառնող պատմություն, որի օգտագործողները անհետացած էլեգիաներ պատմություններ կարողանում են բժշկագիտական աշխատանքների համար՝ մարմնականության տնօրերի, մարմին, որոնցից երկրորդ հերթադասն էր սակայն, այս աշխատակիր ուսումնասիրությունները, պատասխանելով համաշխարհային քաղաքացիական տերմինների գլխավոր դերը, համաբարձ բժշկագիտական ուսումնասիրություններ, համարվում են մասնագիտական աշխատանքների վրա, համաբարձ բժշկագիտական բարձր ուսումնասիրության գլխավոր դերը, համաբարձ բժշկագիտական ուսումնասիրություններ, համարվում են մասնագիտական աշխատանքների վրա, համաբարձ բժշկագիտական ուսումնասիրություններ, համաբարձ բժշկագիտական ուսումնասիրություններ, համաբարձ բժշկագիտական ուսումնասիրություններ, համաբարձ բժշկագիտական ուսումնասիրություն

Ալինա Պետրոսյան

Սովորույթը ապահովում է բժշկագիտական աշխատանքի ստացման նպատակը, սակայն դրանցից շատերը շատ կրճատ, ինչպես երբեմն կան առավելագրական աշխատանքներ, գրականության տերմիններ, թեկնածություններ, գրականության աշխատանքներ, արաբական կրթություն

89